



CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 :2005



Job No.: CTCE/BBMP/KRIDL/W.No.13/CSR-03/592d/QB(BM)/2018-19

24.04.2018

TEST REPORT ON DETERMINATION OF BITUMEN CHARACTERISTICS

* Customer	:	Asst. Executive Engineer, Dasarahalli Project Division, BBMP, Bangalore.
* Agency	:	Technical Manager, KRIDL, Bangalore.
* Name of work	:	Improvements of asphaltting at Kalyana Nagara and surrounding area in Mallasandra Ward No.13, Shettyhalli Sub Division, BBMP, Bangalore.
* Reference	:	BBMP/EE/PD/WO/000032/2017-18 Dated: 22.02.2018
* Sample ID	:	Bitumen
Source/ Location	:	Hot Mix Plant, Bangalore.
Sample Received on	:	22.04.2018
Period of Testing	:	22.04.2018 to 24.04.2018

The results of the tests conducted on the bitumen sample are as follows:

Sl. No	Description	Test Method as per IS	Test Result	Requirement as per IS:73:2013
1	Penetration at 25 °C, 1/10 mm	IS :1203 -1978 (RA-2014)	65	60 to 70
2	Softening point, °C	IS :1205 -1978 (RA-2014)	48	Min. 45
3	Ductility at 27°C, cm	IS :1208 -1978 (RA-2014)	100 >	Min. 50
4	Flash Point, °C	IS :1209 -1978 (RA-2014)	298	Min. 220

* Information is furnished by the Customer/Representative

Note:

- ⇒ This test report shall not be reproduced except in full, without written approval of the laboratory.
- ⇒ The results indicated above are based on the tests carried out on the samples received in the laboratory.
- ⇒ Any Query regarding the report must be reported within 30 days from the date of testing.

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Job No: CTCE/BBMP/KRIDL/W.No.13/BM/ATV/2018-19

24.04.2018

TEST REPORT ON IMPACT VALUE OF AGGREGATES

* Customer	: Asst. Executive Engineer, Dasarahalli Project Division, BBMP, Bangalore.
* Agency	: Technical Manager, KRIDL, Bangalore.
* Name of Work	: Improvements of asphaltting at Kalyana Nagara and surrounding area in Mallasandra Ward No.13, Shettyhalli Sub Division, BBMP, Bangalore.
* Reference	: BBMP/EE/PD/WO/000032/2017-18 Dated: 22.02.2018
* Sample ID	: Hot Mix Plant, Bangalore
Technical Reference	: IS : 2386(Part -4)-1963 (RA-2011)
* Type of Mix	: Bituminous Macadam
Date of Testing	: 24.04.2018



Sl No.	Details	Trial No.		Average
		1	2	
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	382	386	22.40
2	Weight of aggregate passing 2.36 mm sieve after the test = W_2 g	85	87	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	297	299	
4	Aggregate Impact value = percent fines $100 * (W_2/W_1)\%$	22.25	22.54	

*Information is furnished by the Customer/Representative.

Comments:

→ Maximum allowable Aggregate Impact value for Bituminous Macadam is 30%

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Job No.: CTCE/BBMP/KRIDL/W.No.13/BM/Shape.T/2018-19

24.04.2018

TEST REPORT ON FLAKINESS INDEX & ELONGATION INDEX OF COARSE AGGREGATES

* Customer	: Asst. Executive Engineer, Dasarahalli Project Division, BBMP, Bangalore.
* Agency	: Technical Manager, KRIDL, Bangalore.
* Name of Work	: Improvements of asphaltting at Kalyana Nagara and surrounding area in Mallasandra Ward No.13, Shettyhalli Sub Division, BBMP, Bangalore.
* Reference	: BBMP/EE/PD/WO/000032/2017-18 Dated: 22.02.2018
* Sample ID	: Hot Mix Plant, Bangalore
Technical Reference	: IS : 2386(Part -1)-1963 (RA-2011)
* Type of Mix	: Bituminous Macadam
Date of Testing	: 24.04.2018



Sl.No.	Description	Result
1	Flakiness Index	12.58%
2	Elongation Index	13.74%
3	Combined Flakiness & Elongation Index	26.32%

*Information is furnished by the Customer/Representative.

Comments:

→ Maximum allowable Flakiness & Elongation Index for Bituminous Macadam is 30%

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Job No: CTCE/BBMP/KRIDL/W.No.13/BM/Stripping/2018-19

26.04.2018

TEST REPORT ON STRIPPING VALUE OF ROAD AGGREGATE (STATIC IMMERSION TEST)

* Customer : Asst. Executive Engineer, Dasarahalli Project Division, BBMP, Bangalore.
* Agency : Technical Manager, KRIDL, Bangalore.
* Name of work : Improvements of asphaltting at Kalyana Nagara and surrounding area in Mallasandra Ward No.13, Shettyhalli Sub Division, BBMP, Bangalore.
* Reference : BBMP/EE/PD/WO/000032/2017-18 Dated: 22.02.2018
Technical reference : IS: 6241
* Type of Mix : Bituminous Macadam
Date of Testing : 26.04.2018

Type of binder : 60/70
Percentage of binder used : 5.0% by wt.
Total weight of aggregate : 200 g
Total weight of binder : 10.0 g
Temperature of water-bath : 40° C

Observation Number	Stripping, Percentage	Average, Percentage	Average Retained Coating, %
1	3.4	3.27	96.73
2	3.1		
3	3.3		

* Information is furnished by the Customer/Representative.

Comments:

→ Minimum allowable Aggregate retained coating for Bituminous Macadam is 95%

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